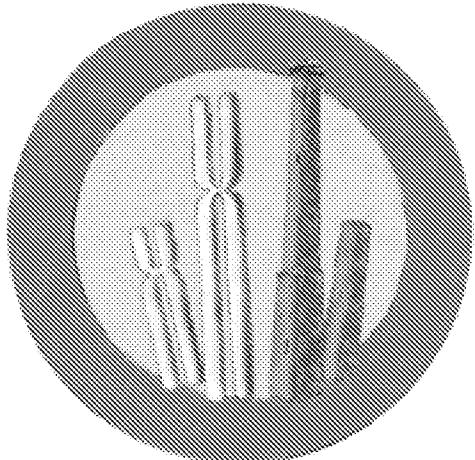


## Fourth European Cytogenetics Conference Bologna, Italy, September 6-9, 2003

For any information, please contact:



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### Organizing Committee

Lidia LARIZZA Chairperson (Milan)  
Antonino FORABOSCO (Modena)  
Konstantin MILLER (Hannover)  
Paul POPESCU (Jouy)  
Mariano ROCCHI (Bari)  
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*Conference Venue: Palazzo della Cultura e dei Congressi, Piazza della Costituzione, 4  
Bologna, Italy, Conference Website: <http://www.FECCBologna.it>*

### INVITATION TO BOLOGNA

Dear colleagues,

On behalf of the European Cytogeneticists Association (E.C.A.) and the organizing committee, I cordially invite you to the “Fourth European Cytogenetics Conference”, dedicated to “Cytogenetics in the Post-Genomic Era”. It will take place in Bologna, on the 6-9 September 2003, hopefully continuing on from the great successes of the previous E.C.A. Conferences.

The Conference will provide an opportunity to review different fields of Cytogenetics, emerging technologies promising a strong acceleration of diagnostic tools and links between Cytogenetics, Genomics, Bioinformatics and Bioethics. As such, I particularly want to invite young post-doc researchers who are involved in making the link between classical cytogenetics and the new diagnostic and basic research frontiers.

Bologna is one of the oldest Universities in Europe and the city itself is proud of its University tradition that has been maintained, over the centuries, to a very high standard. It is easily accessible from all European countries and offers great cultural and artistic attractions both in the city itself and in the surrounding areas.

I look forward to meeting you in Bologna.

Lidia LARIZZA  
Chairperson of the Organizing Committee

## FECC PROGRAM

Saturday, September 6, 2003

### Morning

10:00 AM Registration of the participants  
05:00 PM

### Afternoon

02:00 PM E.C.A. Permanent Working Groups

CANCER CYTOGENETICS, SOLID TUMOR STUDIES within COST Action B19

“Molecular Cytogenetics of Solid Tumors“ meeting, 2-5 pm

EUROPEAN ASSOCIATION OF CYTOGENETIC TECHNOLOGISTS EACT (2h)

CLINICAL AND MOLECULAR APPROACH OF CYTOGENETIC SYNDROMES

CYTOGENETIC TOXICOLOGY AND MUTAGENESIS

CHROMOSOME NOMENCLATURE, DATABASES AND NETWORKS

03:00 PM CHROMOSOME FRAGILITY

MEIOTIC STUDIES. CYTOGENETICS OF GERM CELLS AND EMBRYOS.

MOSAICS. PRE-IMPLANTATION CYTOGENETIC STUDIES

MOLECULAR CYTOGENETICS

04:00 PM ANIMAL, PLANT, AND COMPARATIVE CYTOGENETICS

CYTOGENETICS AND SOCIETY

RESEARCH IN THE SERVICE ENVIRONMENT together with PRENATAL DIAGNOSIS

05:30 PM Opening ceremony

### Honorary lecture

E. Engel: Some lessons from UPD in the framework of contemporary cytogenetics and molecular biology

Chaired by L. Larizza, A. Schinzel

07:00 PM Welcome Reception

Sunday, September 7, 2003

### Morning

09:00 AM Plenary session

Duplicons, Centromeres, telomeres and chromosome rearrangements

Chaired by G. Neri, A. Schinzel

E. Eichler: Understanding the origin and impact of segmental duplications: a comparison of human and mouse genomes

O. Zuffardi: Molecular bases for chromosome rearrangements

M. Rocchi: Centromere plasticity in evolution

A. Barbour: The breakpoint region of the most common isochromosome, i(17q), in human neoplasia is characterized by a complex genomic architecture with large palindromic low-copy repeats

M. Ventura: Neocentromeres in 15q24-26 map to duplicons which flanked an ancestral centromere in 15q25

M. Zollino: Structural chromosome anomalies in MR/MCA syndromes: conventional cytogenetics and telomere analysis.

11:00 AM Coffee-break and Trade Exhibition

11:30 AM Clinical cytogenetics

Chaired by K. Madan, S. Basaran

J.P. Fryns: Behavioural phenotypes in chromosomal syndromes/rearrangements.

A first step to unravel genes and pathways involved in neurocognitive functioning N. Tommerup:

Mendelian cytogenetics: challenges and potentials

L. Shaffer: Mechanisms of terminal deletions

S.Dyer: Application of high resolution CGH in constitutional genetic analyses

M. Riegel: An unusual reciprocal translocation detected by subtelomeric FISH:

Interstitial and not terminal.

01:00 PM Lunch

Afternoon

02:00 PM Poster session no. 1

03:00 PM Concurrent sessions

Cancer cytogenetics: hematological tumors

Chaired by O. Haas, K. Michalova

B.D. Young: Expression profiling of acute myeloid leukaemia

I.Wlodarska: Cytogenetics of lymphoma: an update

S.Strehl: The network of fusion genes.

S. Röttgers: Inversion inv(19)(p13q13) as the first chromosome causing a heterozygous targeted disruption of an oncogene

R.Harris: Inferring something from seeing nothing \_ a cautionary MLL FISH tale

L. van Zutven: Detection of new specific chromosome aberrations in acute leukemia using molecular cytogenetic techniques

Karyotype evolution

Chaired by M. Rocchi, L. Iannuzzi

F. Yang : Reconstructing the ancestral karyotype of eutherian mammals: a systematic approach

S. Müller: Reconstruction of landmark rearrangements during primate karyotype evolution

T.J. Robinson: Correspondence of chromosome segments in low numbered (Equidae) and high numbered (Rhinocerotidae) Perissodactyla, and genetic confirmation of an F1 Black x White rhinoceros hybrid by FISH and microsatellite analysis

C. Sandig: Molecular characterization of the pericentric inversion of chimpanzee chromosome 3 homologous to human chromosome 4

G.P. di Meo: Comparative FISH-mapping of sixty loci in sheep (*Ovis aries*, 2n=54) and river buffalo (*Bubalus bubalis*, 2n=50) chromosomes

04:30 PM Coffee-break and Trade Exhibition

05:00 PM Concurrent sessions

Plant cytogenetics

Chaired by C. Ceoloni, J.S. Heslop-Harrison

J.S. Heslop-Harrison: Chromosomes, chromatin, centromeres and comparisons

M. Feldman: The impact of polyploidy on genome evolution in wheat

H. Schneeweiss: Genomes of polyploids and chromosomal evolution in Hepatica (Ranunculaceae)

S.-M. Rogalska: The transposase of Ac/Ds system is located at rye telomere heterochromatin

#### Laboratory services and management

Chaired by U. Kristoffersson, F. Dagna Bricarelli

O. Bartsch: FISH European Quality Assessment - five year experience of the German, Austrian, and Swiss scheme

K. Simola: EQA in classical cytogenetics - the Labquality experience

D. Taruscio: EQA in classical cytogenetics - the Italian experience

A. Baroncini: The Emilia-Romagna genetics portal

F. Dagna-Bricarelli and Ulf Kristoffersson:

Closing discussion. Where are we going?

06:00 PM General Assembly of the European Cytogeneticists Association

Monday, September 8, 2003

#### Morning

09:00 AM Plenary session

Cancer cytogenetics: solid tumors

Chaired by F. Mitelman, G. Romeo

C. Croce: From gene discovery to cancer treatment

F. Mitelman: Recurrent cytogenetic changes in epithelial tumors

A. Dahlén: Fusion, disruption and overexpression of HMGA2 in bone and soft-tissue chondromas

A.E. Alsop: Distribution of breakpoints on chromosome 18 and 8p in breast, colorectal and pancreatic carcinomas

J. Decker: Characterisation of a complex chromosome 3 rearrangement in a new case of hereditary renal cell carcinoma

M. Daniely: Combined analysis of morphology and FISH for the monitoring of bladder cancer

C. Stock: Differential gene expression in neuroblastoma cell lines

S. Imreh: The “elimination test” suggests a correlation between evolutionary and cancer related chromosome breakage

11:00 AM Coffee-break and Trade Exhibition

11:30 AM Genomic instability and mutagenesis

Chaired by J. Garcia-Sagredo, L. De Carli

M. Schwab: Fragile sites in genomic instability - Molecular cloning strategy for fragile site DNA sequences.

L. Migliore : Mutagenetic approaches in evaluating DNA integrity in human male germ cells

G.L. Buglia: Analysis by Q-FISH of telomere length variation in human lymphocytes exposed to ionising radiation and microgravity.

I. Hayata: Imperceptible effect of high-level natural radiation on health revealed by chromosome study in the Southern China.

U. Rovigatti: MYCN gene amplification and tumorigenesis triggered in human neuroblasts by Micro-Foci inducing Virus (MFV).

A. de Leon: Analysis of mutagenic effects of mobile phone radiofrequency by CBMN test.

01:00-02:30 PM ABBOTT SATELLITE MEETING:  
Molecular Pre- and Postnatal Diagnostics: Clinical Practice and Future Trends

Afternoon

02:00 PM Poster session no. 2

03:00 PM Concurrent sessions

Animal cytogenetics

Chaired by P. Popescu, E. Olmo

F. Fontana: Recent advancements and perspectives in fish cytogenetics

E. Capanna: Chromosomal evolution in mice thirty years after

J. Rubes: Aneuploidy in farm animals

F. Kasai: Identification of the homologue of chicken Z chromosome in turtle and crocodile

Prenatal and preimplantation cytogenetics

Chaired by V. Baranov, E. Blennow

J. Wolstenholme: Mosaicism and prenatal diagnosis: what we know and what we need to know

Y. Verlinsky: Origin of aneuploidy in oocytes and embryos

R. Hochstenbach: Rapid aneuploidy detection in uncultured amniocytes by MLPA (Multiplex Ligation-dependent Probe Amplification)

M.C. Magli: Chromosomal abnormalities in preimplantation embryos

P. N. Scriven: The analytical performance of preimplantation genetic diagnosis (PGD) for reciprocal translocations

L. Voullaire: Complex chromosome abnormality in human cleavage embryos characterized by comparative genomic hybridization

04:30 PM Coffee-break and Trade Exhibition

05:00 PM Concurrent sessions

Chromosomal basis of sterility and reproduction failure

Chaired by D. Rabineau, G. Palka

L. Stuppia: Identification on chromosome 8q11 of an autosomal precursor of the VCY2 gene, mapped within the AZFc locus of the Y chromosome and involved in male infertility

K. Kucheria: Genotype and phenotype correlation in infertile men with Yq microdeletions

J. Parczewska: An attempt to identify additional gene sequences at chromosomal position 13q31 in a patient with OAT- Syndrome.

Prochi Madon: 45,X,t(Y;13)(q11.2;q11),-der(13) with Y microdeletions in an azoospermic male.

G. Ogur: Silencing of a structural trisomy 10 and deletion of FMR1 gene in a female with unbalanced X-autosome translocation 46,X,der(X)t(X;10)(q27;q24)

Chromosomal mosaicism

Chaired by K. Miller, J.P. Bureau

K. Madan: Low-level mosaicism with X-aneuploidy in women with

reproductive failure

J. Crolla: FISH studies in 102 patients with aniridia reveals somatic mosaicism, complex chromosomal rearrangements as well as visible and cryptic interstitial 11p deletions

J.R. Vermeesch: Mosaicism del(8p)/inv dup(8p) in a dysmorphic female infant: A mosaic formed by a meiotic error at the 8p OR gene and an independent terminal deletion event

08:00 PM Conference dinner

Tuesday, September 9, 2003

Morning

09:00 AM Plenary session

Chromosomal structure and nuclear domains

Chaired by T. Cremer, C. Redi

R. van Driel: Nuclear organization and gene expression

S. Kozubek: Detailed studies of the 3D structure of chromosome territories

L.A. Parada: Cell-type specific spatial organization of genomes

N. Ribot: The topological organization of chromosomes in the human male pronucleus during fertilization

10:00 AM Imprinting and epigenetics

Chaired by A. Schinzel, B. Dallapiccola

W. Reik: Imprinting and epigenetic reprogramming in development and disease

A. Baumer: Molecular investigations of the methylation status of imprinted genes in Beckwith-Wiedemann syndrome patients

11:00 AM Coffee-break and Trade Exhibition

11:30 AM From chromosomes to microarrays

Chaired by N. Carter, P.F. Pignatti

M. Speicher: Seven fluorochrome M-FISH and Array CGH:

powerful tools for the delineation of small structural rearrangements

N. Carter: Chromosomes in disarray: Applications of DNA microarrays in the study of chromosomes and their aberrations

C. Melotte: Genotype-phenotype correlation by FISH and microarray in atypical Wolf-Hirschhorn patients

P. Patsalis: Detection of submicroscopic chromosomal abnormalities of unknown location using microarray based technology: The first whole chromosome X microarray and the beginning of the molecular karyotype

01:00 PM Closing session

L. Larizza, A. Schinzel

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Meetings in connection with the FECC Bologna 2003

1- COST ACTION B19 Molecular Cytogenetics of Solid Tumors

Meeting of the WG 5 "Genetic predisposition and susceptibility to cancer"

September 6, 14:00-17:00 Chairs: O. Haas and L. Larizza  
"What causes aneuploidy and chromosome rearrangements?

P. Duesberg: Instability of chromosome structure in cancer cells increases exponentially with degrees of aneuploidy

A. Krämer: Centrosome aberrations and cancer development

C. Griffin: Aneuploidy, centrosome activity and chromosome instability in cells deficient in homologous recombination repair

M.A. Matzke: Does the intrinsic instability of aneuploid genomes have a causal role in cancer?

M. Debatisse: From homogenously staining regions to double minutes

M. Höglund: Coping with complexity. Multivariate analysis of tumor karyotypes

R. Siebert: Cytogenetic evolution in malignant tumors: From patterns to hypotheses

2- International Standing Committee on Human Cytogenetic Nomenclature

Meeting on September 9, 14:00

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## INFORMATION

Congress Venue: Palazzo della Cultura e dei Congressi, Piazza della Costituzione, 4, Bologna, Italy

### Access

By plane: Bologna has an international airport, with direct flights from all major European cities, Milan and Rome. The airport is located about 10 km from the city center

#### By car:

The venue is located near the A1 and A14 highways (exit n. 7 "Fiera" from the loop), and approximately 15 minutes by car from the city center. Large pay car parks are available next to the Palazzo dei Congressi.

#### By bus:

Aerobus (BLQ) from the Airport stopping at the Railway Station (€ 4,50) Bus n. 10 and n. 38 from the Railway Station. Bus n. 28 from the city center (from Via Ugo Bassi, 8 or Via dell'Indipendenza). The bus ride from the city center to the meeting venue takes approximately 15 minutes (up to 30 minutes in the rush hour). Tickets must be purchased beforehand at newsstands or at the ATC booth in front of the Railway Station.

The ticket costs € 1,00 and is valid one hour.

#### By cab:

Radio taxi phone numbers are: +39 051 372727 – +39 051 534141

A cab ride from the center to the Congress venue is approximately 10 minutes.

#### By train:

The Eurocity trains link Bologna to more than 40 European cities. Passengers flying to Rome or Milan Airports can easily reach Bologna by non-stop Eurostar trains or Intercity trains departing every hour. Timetables on Trenitalia web site <http://www.trenitalia.it>

Official Language: The official language will be English.

Abstracts of scientific presentations will be published by Elsevier (Annales de Génétique).

### Poster exhibition

The selected posters will be displayed during the poster exhibition sessions according to their respective topics. Indications for date and time of the session assigned will be sent after the acceptance together

with the necessary information (usable surface available, mode of fixing).

#### Selected presentations

The most significant and original abstracts will be selected for oral presentation within either one of the workshops or plenary sessions.

#### Registration fee

E.C.A. member € 300,00

Technologists (E.C.A. member) € 200,00

Non-E.C.A. member € 350,00

#### Registration and Modes of Payment

Only registration accompanied by the full payment will be considered. Payment can be made either by credit card (VisaCard or EuroCard/MasterCard exclusively) or bank transfer to the conference account. Please note that the payments should be made free of charge for the beneficiary. Any amount charged for banking fees will be collected on site by the Conference Office.

Bank transfer should be made to: F.E.C.C. Italymeeting srl

Bank: UniCredit Banca - Corso Italia, 259 - 80067 Sorrento (NA)

Account n. 3807157 - Country IT - CIN EUR 06 - CIN E - ABI 02008 - CAB 40260

Please indicate the name of the delegate for which the payment is made.

Neither cheques nor Eurocheques are accepted.

#### CME

Accreditation has been requested to the Italian Ministry of Health and EACCME (European Accreditation Council for Continuing Medical Education - CME)

#### Accommodation

Blocks of room have been reserved in different category hotels at preferential rates.

The enclosed hotel registration form should be read carefully and sent, duly completed according to the instructions contained therein, to the organizing secretariat.

We recommend you to make your reservation as early as possible, as hotels in Bologna are always very busy.

Range of price (per person, room only, plus breakfast and local tourist tax)

	Double room	Single room	Double for single use
4* category	€ 69,00-100,00	€ 100,00-150,00	€ 112,00-162,00
3* category	€ 50,00-60,00	€ 60,00-85,00	€ 76,00-93,00
2* category	€ 42,00-54,00	€ 60,00-78,00	€ 70,00-85,00

The choice of hotels to be booked via Italymeeting:

Hotel	Double room	Double room for single use	Single room
1. Baglioni *****		on request	
2. Europa *****	€ 85,00	€ 140,00	€ 120,00
3. Holiday Inn *****	€ 69,00/85,00	€ 112,00/145,00	€ 100,00
4. Internazionale *****	€ 77,50	€ 135,00	€ 110,00
5. Jolly Hotel de La Gare *****	€ 69,00	€ 112,00	€ 101,00
6. Starhotels ****	€ 80,50	€ 141,00	

7. San Donato ****	€ 86,00	€ 137,00	
8. Tre Vecchi ****	€ 85,00	€ 140,00	€ 120,00
9. Astoria ***	€ 59,50	€ 93,00	€ 85,00
10. Fiera ***	€ 55,00	€ 80,00	
11. Holiday ***	€ 55,00	€ 80,00	
12. Metropolitan ***	€ 50,00	€ 80,00	€ 60,00
13. Palace ***	€ 53,00		€ 80,00
14. Paradise ***	€ 46,50	€ 76,00	€ 69,00
15. University ***	€ 55,00	€ 80,00	
16. Accademia **	€ 50,00		€ 70,00

Price per person, breakfast and VAT included

## Social Program

The Welcome Cocktail is included in the registration fees.

The Gala Dinner is optional and subject to payment (€ 90,00). The number of seats available is limited. Advanced reservation is highly recommended.

The conference Office will be pleased to assist the delegates and their accompanying persons in order to make their stay in Bologna as enjoyable as possible.

A detailed program of excursions in and around Bologna will be published on the FECC web site at <http://www.FECCBologna.it>

The programme is provisional and is subject to change. The meeting is restricted to congress participants who have paid their registration fees.

The scientific and the organizing secretariats reserve the right to modify the programme if necessary for technical and/or scientific reasons.

## REMINDER

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Bologna, Italy, Conference Website: <http://www.FECCBologna.it>

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